

NWS FORM E-5 <small>(11-88)</small> <small>(PRES. by NWS Instruction 10-924)</small>	U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL WEATHER SERVICE	HYDROLOGIC SERVICE AREA (HSA) WFO Jackson, Mississippi
MONTHLY REPORT OF HYDROLOGIC CONDITIONS		REPORT FOR: MONTH YEAR August 2013
TO: Hydrometeorological Information Center, W/OH2 NOAA / National Weather Service 1325 East West Highway, Room 7230 Silver Spring, MD 20910-3283		SIGNATURE Alan E. Gerard, Meteorologist In-Charge DATE 09/23/2013

When no flooding occurs, include miscellaneous river conditions, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (NWS Instruction 10-924)

☒ An X inside this box indicates that no river flooding occurred within this hydrologic service area.

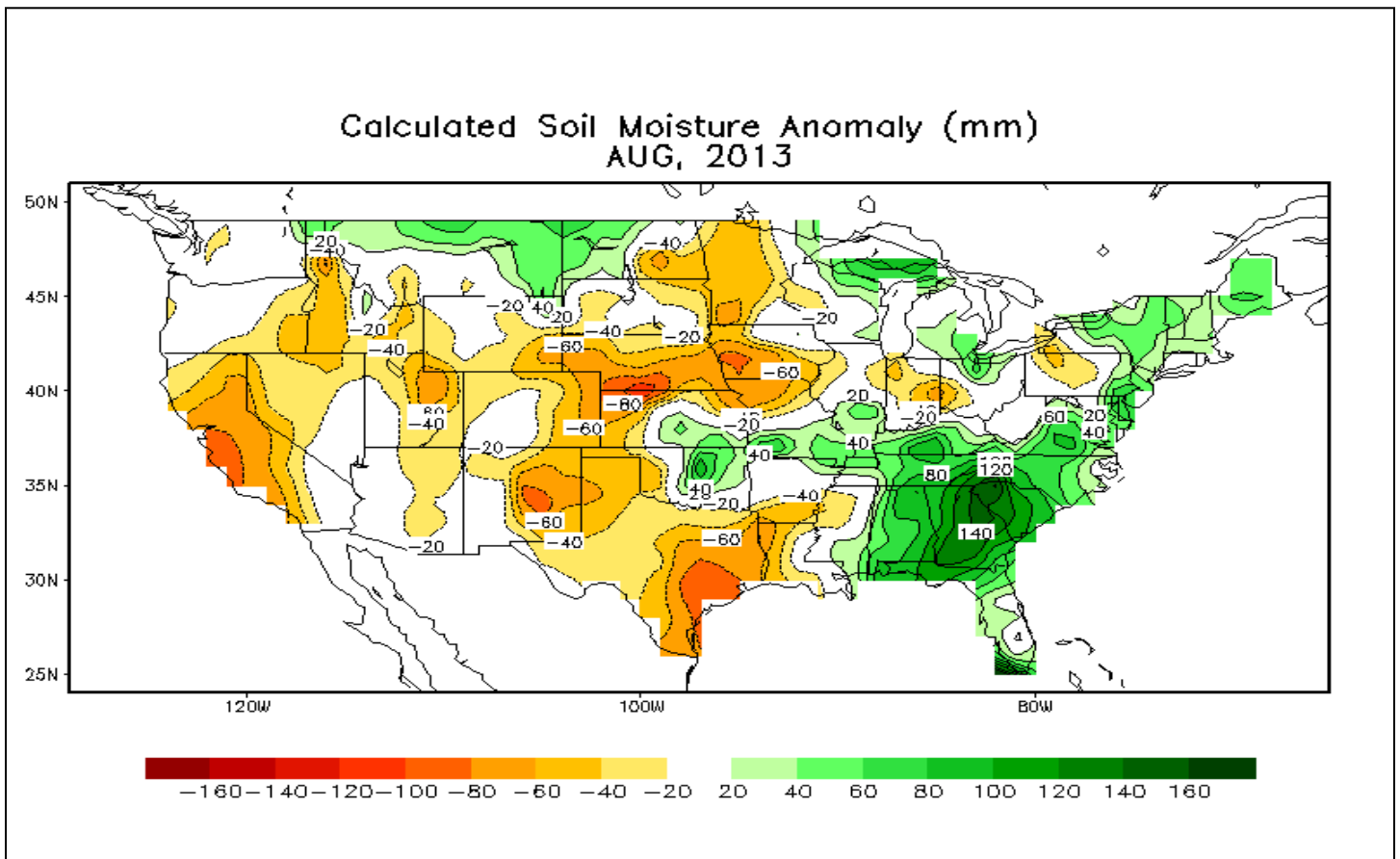
Synopsis...

August proved to be a relatively dry month this year. Rainfall at all ASOS locations fell below normal. The wettest site was Hattiesburg which received a little over four inches of rainfall, but was still almost three-quarters of an inch below normal for the month. Greenville was the driest location with 0.78 inches of rainfall and was over an inch and half below normal. Vicksburg-Tallulah received 1.05 inches but was the biggest loser by being 2.6 inches below normal rainfall. Temperature-wise, all ASOS sites but Jackson were slightly below normal for the month. Average temperatures ran from 79.5 degrees at Meridian to 81.6 degrees at Jackson.

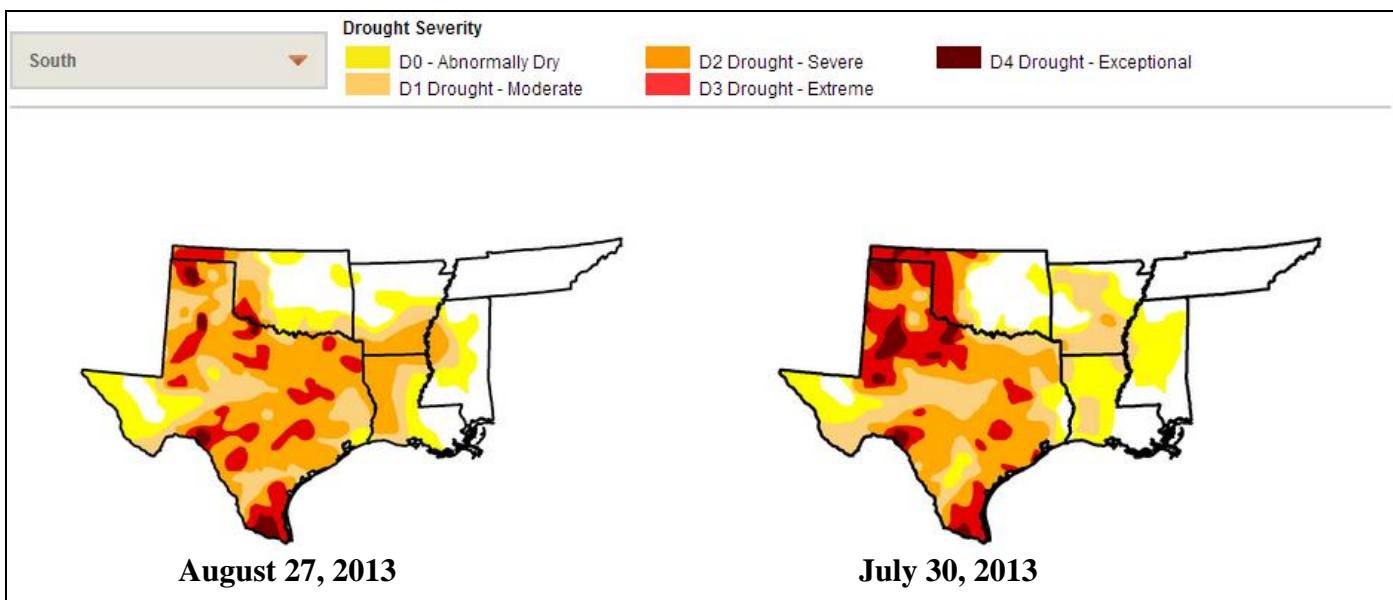
The beginning of August brought a slow-moving cold front through the state, which in turn brought some scattered showers and thunderstorms. The front made its way to the coast and gradually diminished. Around the 7th, a north-south boundary set up in east Mississippi that provided a bit of rainfall for the far eastern portion of the state. After this boundary dissipated, a few days followed of our characteristic, summery, scattered showers and thunderstorms as the patterns of the upper atmosphere struggled to organize themselves. About mid-month, the 11th, high pressure began to build into the South and an upper low formed off of the Great Lakes region. This low pressure system moved off to the east and brought a cold front through Mississippi on the 14th. The front stalled along the coast and dropped rainfall there while the remainder of the state remained dry. High pressure then built into the majority of the eastern U.S. and dominated the region for the rest of the month. Meanwhile, a small tropical low formed off of the Mississippi Coast and meandered for a couple days before dissipating on the 20th. This low brought rainfall to the southeastern part of the otherwise dry state. Low-level flow rotated to the south on the 21st and began bringing in Gulf moisture again, leading to daily afternoon showers and thunderstorms. The flow rotated around the high again on the 26th which resulted in northerly flow for the region and hot and dry weather for the rest of the month.

River and Soil Conditions...

Soil Moisture Map:

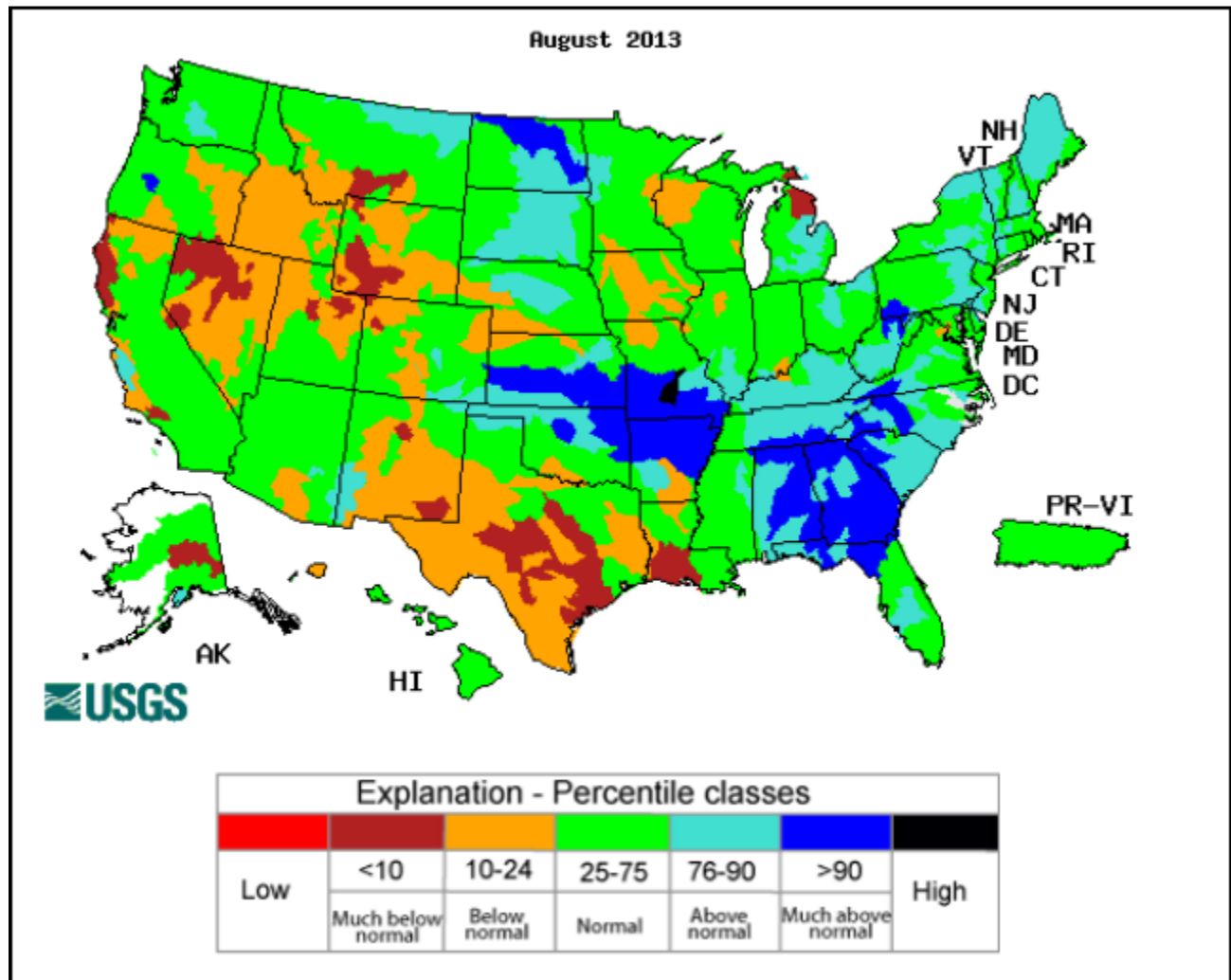


Drought Monitor Comparison:



Streamflow:

The United States Geological Survey's (USGS) August 2013 river streamflow records were compared with all historical August streamflow records. Streamflow was near normal across Mississippi. Streamflow was near below in Southeast Arkansas and much of Northeast Louisiana.



August 2013

River Conditions and flood potential:

No flooding occurred along the river systems in HSA. Rivers experienced only a few minors during the month of August.

The Mississippi River from Arkansas City to Natchez fell for the first two weeks of the month before rising once again during the third week of the month followed by yet another fall for the remainder of the month.

The climatic outlook for the next 3 months shows equal chances for above, below, or normal temperatures and precipitation. Based on current soil moisture, streamflow, and the 3 month weather outlook, flood potentials are as follows:

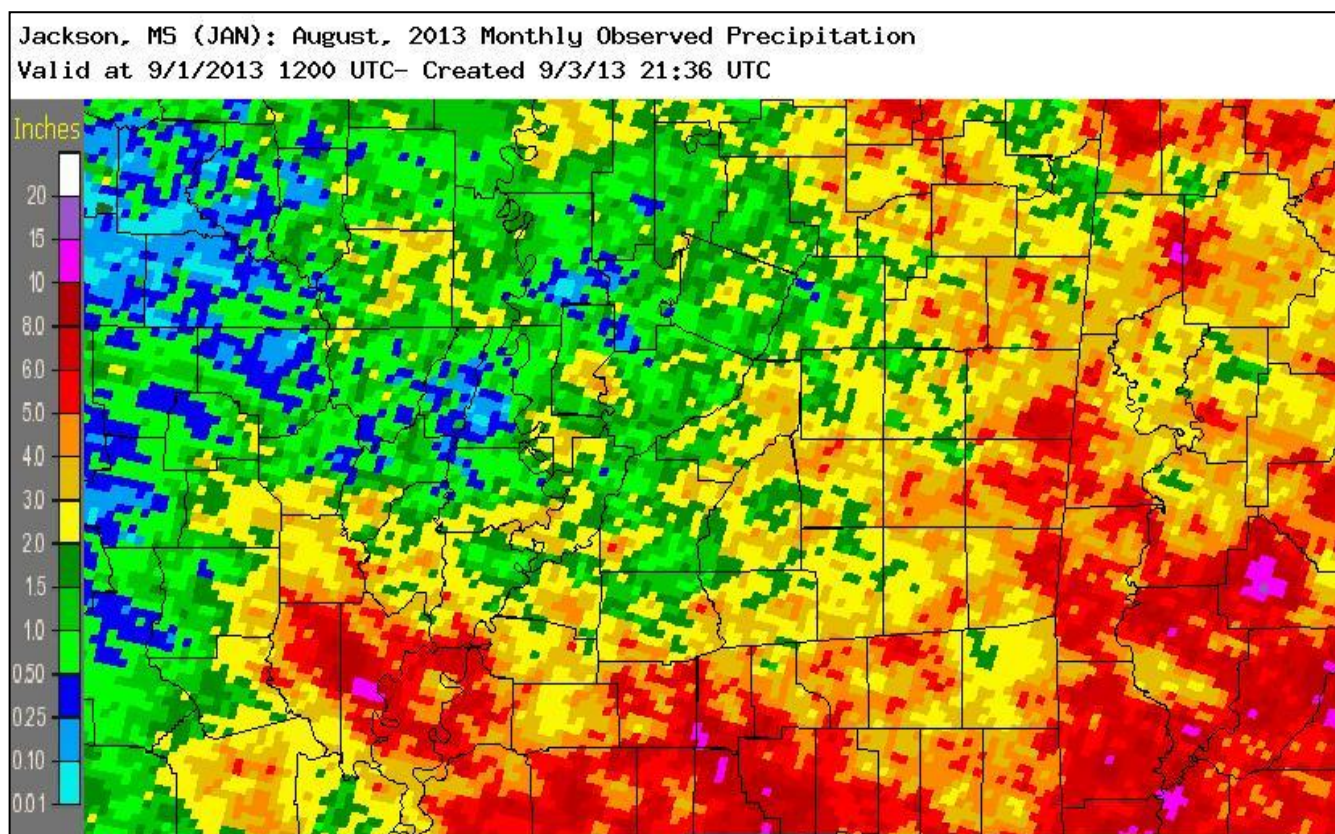
<i>Pearl River System:</i>	Average.
<i>Yazoo River System:</i>	Average.
<i>Big Black River System:</i>	Average.
<i>Homochitto River System:</i>	Average.
<i>Pascagoula River System:</i>	Average.
<i>Northeast LA and Southeast AR:</i>	Average.
<i>Tombigbee River System:</i>	Average.
<i>Mississippi River:</i>	Average.

Rainfall for the month of August:

The largest rainfall amounts in the HSA from NWS Cooperative Observer reports during the period from 7 am on July 31st until 7 am on August 31st were: 9.40 inches of rainfall at Purvis, MS; 8.50 inches at Crandall, MS; 7.63 inches at Columbia, MS; 6.55 inches at Macon, MS; 6.33 inches at Collinsville, MS; 5.33 inches at Laurel, MS; and 5.23 inches at Newton, MS.

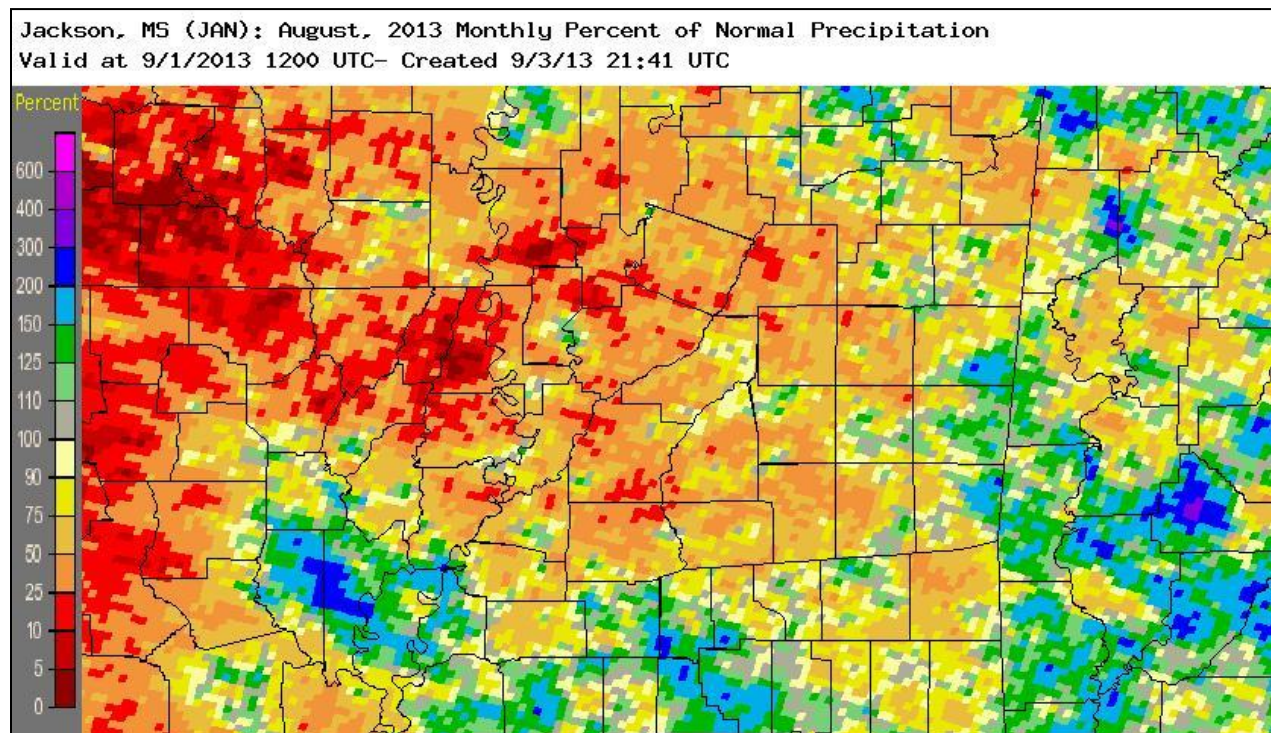
Some lesser monthly amounts: 0.10 inches at Oak Grove, LA; 0.23 inches at Pioneer, LA; 0.37 inches at Rayville, LA; 0.42 inches at Moorhead, MS; 0.52 inches at Satartia, MS; 0.80 inches at St. Joseph, LA; 0.81 inches at Kosciusko, MS; 0.83 inches at Yazoo City, MS; 0.85 inches at Eudora, AR; and 0.92 inches at Crossett, AR.

August rainfall estimates:



Rainfall Estimates

Percent of Normal Precipitation:

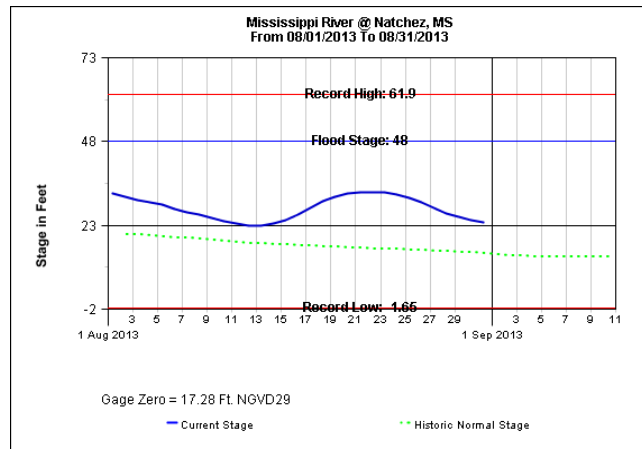
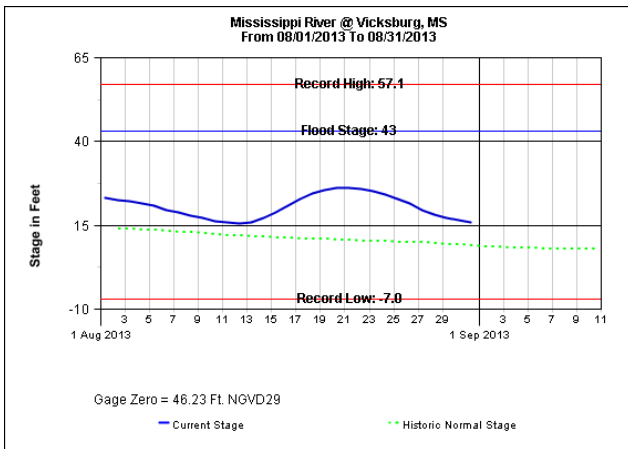
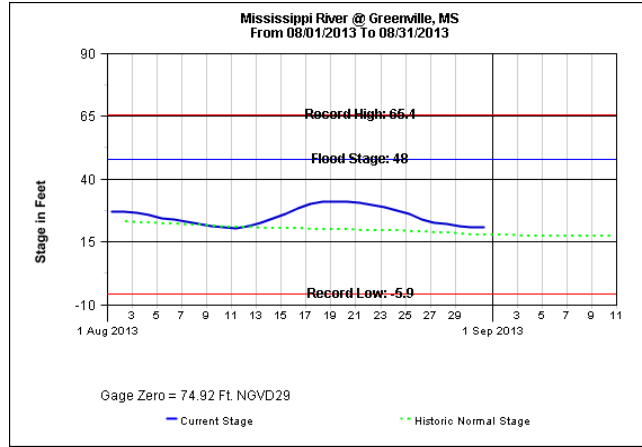
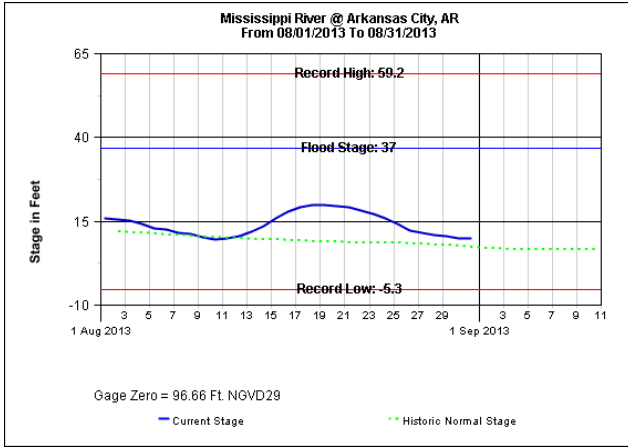


Note: Observer rainfall and MPE may differ due to time differences.

August Rainfall for selected cities:

City (Airport)	Rainfall	Departure from Normal	2013 Rainfall	2013 Departure from Normal
Jackson, MS	3.05	-1.19	43.75	+6.47
Meridian, MS	3.69	-0.30	49.52	+10.56
Greenwood, MS	2.53	-0.30	38.25	+4.18
Greenville, MS	0.78	-1.68	29.04	-5.52
Hattiesburg, MS	4.03	-0.70	52.17	+10.01
Vicksburg, MS	1.05	-2.60	48.20	+11.63

Mississippi River Plots for August 2013 **Plots courtesy of the United States Army Corps of Engineers**



Monthly Preliminary high and low stages:

Location	Flood Stage (ft)	High Stage (ft)	Date	Low Stage (ft)	Date
Arkansas City	37	20.12	8/18/13	9.68	8/31/13
Greenville	48	31.20	8/19/13	20.46	8/31/13
Vicksburg	43	26.31	8/21/13	15.44	8/12/13
Natchez	48	33.00	8/22/13	22.80	8/13/13

Total Flood Warning products issued: 0
Total Flood Statement products issued: 0
Total Flood Advisories MS River : 0
Daily Climate and Ag WX Products (AGO'S) issued: 31
Daily CoCoRaHS Rainfall Products (LCO'S) issued: 31
Daily River and Lake Summary Products (RVD'S) issued: 31

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Note: Provisional stage and precipitation data were furnished with the cooperation of the Mississippi, Louisiana, and Arkansas National Weather Service Cooperative Observer Programs, United States Geological Survey (USGS), United States Army Corps of Engineers (USACE), Pearl River Valley Water Supply District (PRVWSD), Pat Harrison Waterway District, Pearl River Basin Development District, and the Mississippi Department of Environmental Quality.

cc: USGS Little Rock District
USGS Ruston District
USACE Mobile District
USACE Vicksburg District
USACE Mississippi Valley Division
USGS Mississippi District
SRH Climate, Weather and Water Division
Lower Mississippi River Forecast Center
Pearl River Valley Water Supply District
Hydrologic Information Center
Southern Region Climate Center
Pat Harrison Waterway District
Pearl River Basin Development District